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EXAMINER

EDELL, JOSEPH F

ART UNIT PAPER NUMBER

3636

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/805,586
Filing Date: March 13, 2001
Appellant(s): LOTSPIH, JOHN ANTHONY

Lotspih, John A.
For Appellant

EXAMINER'S ANSWER

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This is in response to the appeal brief filed 08 June 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-20 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,065,772	YAMAMOTO et al.	5-2000
6,129,377	OKUMURA et al.	10-2000
5,618,595	MATSUSHIMA et al.	4-1997

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph. This rejection is set forth in a prior Office Action, mailed on 13 November 2003.

Claims 1-4, 7-15, and 18-20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. in view of Okumura et al. This rejection is set forth in a prior Office Action, mailed on 13 November 2003.

Claims 5, 6, 16, and 17, as best understood, are rejected under 35 U.S.C. 103(a). This rejection is set forth in a prior Office Action, mailed on 13 November 2003.

(11) Response to Argument

The rejections set forth in the Office Action mailed 13 November 2003 correctly addresses all the limitations recited in pending claims 1-20, therefore the rejections are maintained.

Applicant argues that the rejection of claims 1-20 under 35 U.S.C., first paragraph, is improper. The claim limitation at issue in claims 1, 11, and 12 recites "wherein the expansion restraining elements are adapted to remain operative so as to provide expansion restraint upon full inflation of the air bag cushion *without failing* such that the expansion restraining elements restrict expansion of the air bag cushion" (emphasis added). Initially, Applicant states that the specification provides adequate disclosure, coupled with information known in the art, to make or use the invention without undue experimentation. As evidenced by the teachings of Yamamoto et al., expansion restraint elements of air bag cushion may be sewn seams 55 (Fig. 9) that remain operative and sewn seams 57 (Fig. 9) that tear during inflation. Therefore, one skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed because the specification does not expressly state or imply the criteria for determining a successful and/or failing expansion restraining element. Is a sewn seam that is intended to tear upon inflation of the air bag cushion considered a failing expansion restraint element by the standards of the instant application? The tear seam would be operating in its intended manner and one of ordinary skill would not know the parameters for determining the failure limitation. At the time the application was filed, one skilled in art would not know the appropriate

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type of woven fabric to use in constructing the sewn seams to create expansion restraint elements that remain operative without failing. Also, one skilled in the art at the time the application was filed would not know the necessary density of the sewn seam to create expansion restraint elements that remain operative without failing. Thirdly, one skilled in the art at the time the application was filed would not know the maximum allowable inflation pressure that would be necessary such that the expansion restraint elements remain operative without failing upon full inflation. In the Appeal Brief, Applicant merely refers to the preferred geometries for the restraining elements and the techniques for forming the restraining elements as evidence that the claimed restraining elements would not require undue experimentation. However, this fails to establish the claimed limitation is expressly stated in the originally filed specification or would have been known by one of ordinary skill in the art. In order to comply with the written description requirement of 35 U.S.C. 112, first paragraph, each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure. In establishing inherency, the evidence must make clear that the missing descriptive matter is necessarily present in the description, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The fact that a certain thing may result from a given set of circumstances is not sufficient. See MPEP 2163(I)(b). Therefore, Applicant has not adequately established that the originally filed specification expressly, implicitly, or inherently supports the claim limitation at issue by referring to geometry and general formation techniques of the expansion restraining elements.

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With respect to the 35 U.S.C. 112, first paragraph, rejection, Applicant also states that determining the criteria for failure of an expansion restraining element is a concept which would be well known to any ordinary person and would certainly be obvious to one of ordinary skill in the art. A splitting pants seam is provided by Applicant as an example to show that failure of an expansion element is a concept that is well known in the art. Examiner agrees that determining whether a seam *has* failed is obvious to any ordinary person by virtue of the fact that the person will see that the seam is no longer intact. However, in order to create an expansion restraint element that remains operative upon inflation of the of an air cushion without failing, one must know the type of fabric necessary for the sewn seam, the density of stitching in the sewn seam, and the pressure necessary for inflation of the air cushion. These factors are key in constructing the claimed expansion restraining elements and are not specified in the application as filed. One of ordinary skill in the art at the time the application was filed would be required to conduct undue experimentation to determine all the parameters necessary to create such an air cushion.

With respect to Applicant remarks about the Advisory Action regarding the Examiner's statements concerning excessive pressure within the air bag cushion, Examiner was attempting to give an example of undue experimentation needed to give one of ordinary skill enough information to make or use the invention. See above statements that establish the lack of the written description requirement and the need for undue experimentation.

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Next, Applicant argues that the rejection of claims 1-4, 7-15, and 18-20 under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. in view of Okumura et al. is in error. In general, Applicant states that it would not be obvious to modify the expansion restraint element of Yamamoto et al. to remain operative upon full inflation of the air cushion. This position appears to be in direct contradiction to Applicants previous remarks regarding the rejection under 35 U.S.C. 112, first paragraph. On page 4, lines 6-8 of the Appeal Brief, Applicant states that “[c]ertainly, since seams which remain intact are known, the use of such seams or other joining techniques should not require undue experimentation.” How can joining techniques wherein the expansion restraint element remain intact be obvious to one of ordinary skill, yet modifying the air cushion of Yamamoto et al. such that the expansion restraint element remain operative be unobvious? Simply put, Applicant cannot have it both ways. Either the material and density used to make the sewn seams coupled with the necessary inflation pressure are determining factors in constructing the expansion restraint elements, or the sewn seams are obvious components well known to one of ordinary skill in the art. In the event that the expansion restraint elements that remain operative upon inflation are obvious, modifying the air bag assembly of Yamamoto et al. because it would have been an obvious matter of design choice to modify expansion restraint element to remain operative upon inflation since Applicant has not established that the specific restraint element solves any stated problem or is for any particular purpose.

With respect to Applicant’s argument that the replacement of the failing expansion restrain element of Yamamoto et al. with an expansion restrain element that

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remains operative without failing represents a fundamental change in the principle of operation of the air bag cushion, Examiner cites the embodiments on Yamamoto et al. to establish that replacing the failing expansion restrain element would not represent a fundamental change. A tear seam and delayed inflation of the upper rear chamber (Fig. 11(c)) of Yamamoto et al. is not the fundamental operation of the air bag cushion. Overall, the principle operation of the air bag embodiments shown in Yamamoto et al. is such that the deployment of the air bag is divided into three chambers wherein a first chamber is deployed in a position between a passenger's torso and a vehicle side part, a second chamber is deployed in a position between the passenger's torso and head and the vehicle side part, and a third chamber is deployed in a position between the passenger's head and the vehicle side part. The embodiment shown in Figures 9-12(d) of Yamamoto et al. is an air bag assembly that successfully deploys air into the three chambers while avoiding the seat restraint X (Fig. 9). Figures 11(a)-11(c) of Yamamoto et al. show that the chambers are constructed to direct air flow in a zigzag motion through the use of staggered seams 55,56 and communication holes 54,56. The tear seam is not critical for successful deployment of the air bag assembly but rather aids in folding of the air bag in module 20 (Fig. 4) and assisting in delayed expansion of the third chamber (see column 8, lines 15-28). Moreover, replacing the tear seam with a seam that remains operative would still provide a delayed expansion of the third chamber and does not substantially alter the deployment of the third chamber. For illustrative purposes, Applicant states that replacing the seam between the upper chamber 52 and upper rear chamber 53 would affect the pressure relief of the upper

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chamber 52 and prevent proper inflation of the upper rear chamber 53 resulting in an uninflated zone. However, Yamamoto et al. does not state that the seam remaining operative would prevent inflation of the upper rear chamber 53, and Figure 11(b) clearly shows that airflow G4 is directed to inflate the upper rear chamber 53.

The combination of Yamamoto et al. and Okumura et al. teaches an air bag cushion having three chambers with expansion restraint elements that remain operative upon full inflation without failing. This modification would not render the air bag cushion of Yamamoto et al. unsatisfactory for its intended purpose. The intended purpose of the air bag cushion of Yamamoto et al. is to protect the occupant in the event of a collision, and modifying the air bag cushion in view of the teachings in Okumura et al. would not undermine this intended purpose. Applicant cites *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) to support the assertion that it is unacceptable to propose modification that would render the prior art invention unsatisfactory for its intended purpose. However, *In re Gordon* addresses the issue of whether motivation existence in a single prior art reference disclosing a blood filter assembly to modify such an assembly to operate in an upside down orientation. *In re Gordon* is not applicable in this instance because motivation to modify the air bag cushion of Yamamoto et al. is established in the teachings of Okumura et al. Note, Applicant fails to address Examiner's reasoning in Office Action mailed 13 November 2003 stating that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the

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test is what the combined teachings of the references would have suggested to those of ordinary skill in the art and does not include knowledge gleaned only from the applicant's disclosure. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The motivation in Okumura et al. arises from utilizing a single piece of woven fabric and does not require the use of two materially different seam threaders resulting in simple and inexpensive manufacture.

The rejection of claims 5, 6, 16, and 17 under 35 USC 103(a), in further view of *Matsushima et al.*, was argued solely on the premise that the cited art does not teach or suggest the air bag assembly defined in claims 1-4, 7-15, and 18-20. Therefore, Examiner maintains the 35 USC 103(a) rejection of claims 5, 6, 16, and 17.

For the above reasons, it is believed that the rejections should be sustained.



JE

February 16, 2005

Conferees

 
Peter Cuomo and Carl Friedman

Respectfully submitted,



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